



SignalLED User Handbook

This handbook is for use with the following stock codes:

LD-20F1REC	LED Single Flush Mounting 20cm RECORD sign
LD-20F1ONA	LED Single Flush Mounting 20cm ON AIR sign
LD-20F1MCL	LED Single Flush Mounting 20cm MIC LIVE sign
LD-40F1REC	LED Single Flush Mounting 40cm RECORD sign
LD-40F1ONA	LED Single Flush Mounting 40cm ON AIR sign
LD-40F1MCL	LED Single Flush Mounting 40cm MIC LIVE sign
LD-40F1PHN	LED Single Flush Mounting 40cm PHONE sign
LD-40F1TRF	LED Single Flush Mounting 40cm TRAFFIC FLAG sign
LD-40F1ADB	LED Single Flush Mounting 40cm AD BREAK sign
LD-40F1REH	LED Single Flush Mounting 40cm REHEARSAL sign
LD-40F1DOR	LED Single Flush Mounting 40cm DOOR sign
LD-40F1OBT	LED Single Flush Mounting 40cm OBIT sign
LD-40F1NOE	LED Single Flush Mounting 40cm NO ENTRY sign
LD-40F1EXIT	LED Single Flush Mounting 40cm EXIT sign
LD-40F1SIL	LED Single Flush Mounting 40cm SILENCE sign
LD-40F1MET	LED Single Flush Mounting 40cm MEETING IN PROGRESS sign
LD-40F1INT	LED Single Flush Mounting 40cm INTERVIEW IN PROGRESS sign
LD-40F2TX-REH	Twin Flush Mounting Signs 2x20cm Twin 'TX' & 'REH' sign
LD-40F2ONA-MCL	Twin Flush Mounting Signs 2x20cm Twin 'ON AIR' & 'MIC LIVE' sign
LD-40F2ONA-SIL	Twin Flush Mounting Signs 2x20cm Twin 'ON AIR' & 'SILENCE' sign
LD-40E1REC	SignalLED double sided end mounting 40cm RECORD sign
LD-40E1ONA	SignalLED double sided end mounting 40cm ON AIR sign
LD-40E1MCL	SignalLED double sided end mounting 40cm MIC LIVE sign
LD-40E2	SignalLED twin double sided end mounting 2 x 20cm sign
LD-KE1	SignalLED conversion kit, single flush mount to end mount
LD-KC1	Ceiling Mounting For 40cm Or 20cm Flush Mounting Signs
LD-IT	SignalLED end mount sign installation tool

SIGNALLED STUDIO ILLUMINATED SIGNS HANDBOOK



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LD-40F1MCL	LED Single Flush Mounting 40cm MIC LIVE sign
LD-40F1PHN	LED Single Flush Mounting 40cm PHONE sign
LD-40F1TRF	LED Single Flush Mounting 40cm TRAFFIC FLAG sign
LD-40F1ADB	LED Single Flush Mounting 40cm AD BREAK sign
LD-40F1REH	LED Single Flush Mounting 40cm REHEARSAL sign
LD-40F1DOR	LED Single Flush Mounting 40cm DOOR sign
LD-40F1OBT	LED Single Flush Mounting 40cm OBIT sign
LD-40F1NOE	LED Single Flush Mounting 40cm NO ENTRY sign
LD-40F1EXIT	LED Single Flush Mounting 40cm EXIT sign
LD-40F1SIL	LED Single Flush Mounting 40cm SILENCE sign
LD-40F1MET	LED Single Flush Mounting 40cm MEETING IN PROGRESS sign
LD-40F1INT	LED Single Flush Mounting 40cm INTERVIEW IN PROGRESS sign
LD-40E1MCL	SignalLED double sided end mounting 40cm MIC LIVE sign
LD-40E1ONA	SignalLED double sided end mounting 40cm ON AIR sign
LD-40E1REC	SignalLED double sided end mounting 40cm RECORD sign
LD-40E2	SignalLED twin double sided end mounting 2 x 20cm sign
LD-IT	SignalLED end mount sign installation tool
LD-KC1	Ceiling Mounting For 40cm Or 20cm Flush Mounting Signs
LD-KE1	SignalLED conversion kit, single flush mount to end mount

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This version combines the LD-F1 and the LD-E1 handbooks.

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Warranty Information

This product is supplied with a 12 month back to base warranty. For further details, please refer to the Sonifex website: <http://www.sonifex.co.uk/company/terms/index.shtml>

In order to register the date of purchase so that we can keep you informed of any design improvements or modifications, it is important to complete the warranty registration document that is enclosed and return it to Sonifex Ltd in the UK.

For your own records you should write down the serial number of the SignalLED sign.

Serial Number	TL.....
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Introduction

The SignalLED Sign is a new elegant approach to illuminated displays and signage. Using the latest technology and components, the SignalLED sign can be simply configured onsite for colour and mode.

- Choose from white, green, red, blue, yellow, orange, cyan and magenta.
- Choose from a large range of different sign text.
- Four illumination modes: constant, flashing, pulsing and off.
- Two control pull-low inputs.
- Single or twin signs with separate controls.
- DC input power supply provided.
- Flush mounted to the wall or end mounted.
- Double sided end mounting available for use in corridors.
- Simple to install.
- Custom signs can be made to order.

Safety Information

This equipment has been designed to meet the safety regulations currently advised in the country of purchase and it conforms to the safety regulations specified by use of the CE Mark. This equipment operates in a horizontal position.

Handling Notes

The SignalLED sign should be installed in an area which is not subject to excessive heat or cold. Also, you should avoid installing it in atmospheric conditions which are dusty, smoky, or dirty, or where there is moisture or vibration. The sign is for internal use only. The unit is not sealed and cannot be used outside or in very damp or humid environments.

Do not use any solvents to clean the sign. Use a soft dry brush or a clean cloth moistened with water or mild detergent.

Avoid using the SignalLED sign close to strong sources of electromagnetic radiation such as video monitors or high power electric cabling.

In all cases the SignalLED sign should be installed and serviced by qualified personnel.

1 POWER SUPPLY APPROVAL DOCUMENTS



Power Supply Approval Documents

The power supply used with the SignalLEDs is UL, EC and CC approved. For a more detailed view of the certificates, please check online at: <http://www.sonifex.co.uk/signalled/index.shtml>

Your Ref: 032063
 Our Ref: 032063
 Enquiries: Administration
 Telephone: (075) 3217 0381
 Fax number: (075) 3406 3808
 Email: enquiries@signalled-qtd.gov.au

19 December 2005

Mr April Qin
 ENG Electric Co., Ltd.
 c/o No 3611a Zeng - ITS (Guangzhou)
 3/F, Hongyue Building, 728 Kaili Ave,
 Guangzhou Economic & Technological Development District,
 Guangzhou 510730 - CHINA

Dear Ms Qin

**CERTIFICATE OF APPROVAL OF PRESCRIBED ELECTRICAL EQUIPMENT
EXTRA LOW VOLTAGE POWER SUPPLY UNIT
POWER ADAPTOR
MODEL NO. 3A-061WFXXA**

I am pleased to advise that your application for approval of the above mentioned electrical equipment has been approved.

The registration number allocated to the electrical equipment is Q9032063. This registration number must be marked on all electrical equipment covered by the enclosed. Alternatively you may use the Regulatory Compliance Mark (RCM) in lieu of the registration number. Please advise this office if you intend to use the RCM in lieu of the registration number.

Please note that it is a requirement of the Electrical Safety Act and Regulations 2002 that if you modify the electrical equipment in any way you are required to notify this office of the details of the modifications for approval. An application for modification form is available from this office.

If you have supplied a sample of the product for examination, please arrange to collect the sample within thirty days of the date of this letter. If the sample has not been collected by this date it will be disposed of in accordance with section 118 of the Electrical Safety Regulation 2002.

You are reminded that it is mandatory for all plugs manufactured or imported to incorporate insulated live pins from 3 April 2005. It is expected that all electrical equipment with wet insulated pin plugs, be sold from all points of sale, by 3 April 2006.

Yours sincerely

D EDE
 Director - Equipment Safety
 Electrical Safety Office

Electrical Safety Office
 Level 4, Pacific House Building
 100 Williamstown Road
 Melbourne, Victoria 3006
 Australia
 Tel: (03) 9593 9999
 Fax: (03) 9593 9999
 Email: info@signalled-qtd.gov.au

*Notice: It is a requirement of the Electrical Safety Act and Regulations 2002 that if you modify the electrical equipment in any way you are required to notify this office of the details of the modifications for approval. An application for modification form is available from this office.

Fig 1-1: Australia Certificate of Approval

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME
 SYSTEME DE CERTIFICATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

**CB TEST CERTIFICATE
CERTIFICAT D'ESSAI OC**

Product Product Name and address of the applicant Name et adresse du demandeur Name and address of the manufacturer Nom et adresse du fabricant Name and address of the factory Nom et adresse de l'usine Rating and principal characteristics Valeurs nominales et caractéristiques principales Trade mark (if any) Marque de fabrique (s'il y a lieu) Multitype Ref. Réf. de base Additional information (if necessary) Informations complémentaires (si nécessaire) A sample of the product was tested and found to be in conformity with Un échantillon du produit a été testé et a été trouvé conforme à la as shown in the Test Report Ref. No. selon indiqué dans le Rapport d'essais numéro de référence qui constitue une partie du certificat This CB Test Certificate is issued by the National Certification Body Ce Certificat d'essai OC est émis par l'organisme National de Certification	Adaptor (Power Adaptor) ENG Electric Co., Ltd. 6F No.336 Sec.1 MingSheng N.Rd. Kuangshan Hsiang, Taoyuan Hsien, TAIWAN ENG Electric Co., Ltd., 6F No.336 Sec.1 MingSheng N.Rd. Kuangshan Hsiang, Taoyuan Hsien, TAIWAN Shenzhen Eng Electronics Co., Ltd. China Nuclear Group Int. East Block, Baimiao, Futang, Baoan, Shenzhen, PEOPLE'S REPUBLIC OF CHINA Rated input voltage: 100-240 Vac Rated input current: 0.3 A Rated frequency: 50/60 Hz Rated output: See appendix A Protection class: II Trade mark (if any): ENG Multitype Ref.: 3A-061WFXXT "Y" can be 03, 05, 12, 18 or 24, "Y" can be A, C, E, U or IMAK 3 Additional information (if necessary): IEC 60950-1:2001 A sample of the product was tested and found to be in conformity with Un échantillon du produit a été testé et a été trouvé conforme à la as shown in the Test Report Ref. No. selon indiqué dans le Rapport d'essais numéro de référence qui constitue une partie du certificat This CB Test Certificate is issued by the National Certification Body Ce Certificat d'essai OC est émis par l'organisme National de Certification
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Date: 2005-09-28
 CB 05-05-11027 117
 TÜV Product Service GmbH - Certification Body - Prüfzentrum 05 - D-80339 München
 Product Service

Fig 1-2: CB Certificate of Approval

Installation

Mounting The Sign

Route the signal and power supply cables before finalising the mounting of the sign. These cables can be routed either through the aperture, or through the cable cut-outs in the back of the wall mount moulding.

The LED sign should be mounted on a firm solid surface. The sign is supplied with a mounting kit comprising 2 x wall plugs and 2 x large flange screws.

Note: You'll need the following tools to mount the sign: an electric drill fitted with a 6mm diameter masonry drill bit, a No.1 Pozi-drive screwdriver and a spirit level.

- Drill 2 holes, approximately 34mm deep, using a 6mm diameter masonry drill at the pitch shown on the drawings.
- Insert the wall plugs flush with the surface.
- Use a spirit level on the aluminium tube section to set the sign level before fully tightening.

The screws can also be used for fixing into wood. For correct fitting drill a small pilot hole into the wood before fitting the screw.

Opening The End Covers

To get access to the sign mounting points, the side covers need to be opened. Use a No.1 Pozi-drive screwdriver to unscrew the side cover and gently slide the cover forward approximately 8mm until it reaches the stops. Pivot open the cover. Please note: do not to use excessive force when opening the cover.

LD-20F1 & LD-40F1 Flush Sign Mounting Requirements

This sign is to be mounted flush to a wall. Minimum clearances from the sign to an adjacent wall or ceiling are shown below.

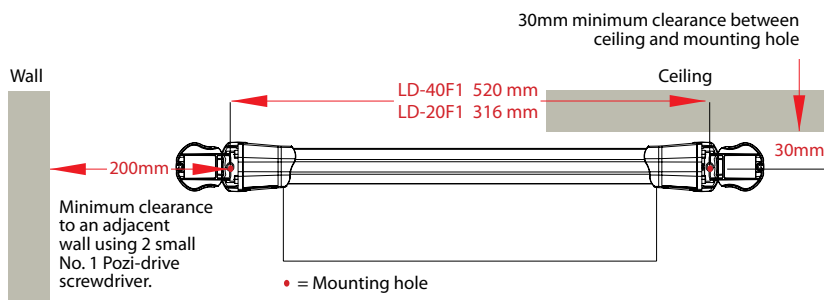


Fig 2-1: LD-20F1 & LD-40F1 Flush Sign Mounting Requirements

An absolute minimum of 60mm is required for the opened end cap, a right angled screwdriver would be needed to screw (unscrew) the end cap retaining screw.



LD-40E1 & LD-40E2 End Mounting Requirements

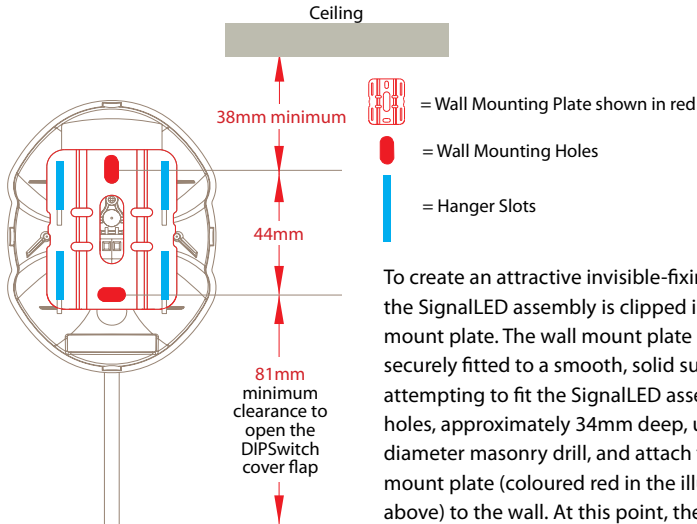


Fig 2-2: LD-40E1 & LD-40E2 End Mounting Requirements

To create an attractive invisible-fixing finish, the SignalLED assembly is clipped into a wall mount plate. The wall mount plate must be securely fitted to a smooth, solid surface before attempting to fit the SignalLED assembly. Drill 2 holes, approximately 34mm deep, using a 6mm diameter masonry drill, and attach the wall mount plate (coloured red in the illustration above) to the wall. At this point, the LD-IT, end-mount installation tool can be used to hold the sign in place while you connect the power and signal cables. The cable retention clips can be used to hold the cables in the sign. See page 4 for information on connecting the Power and Signal cables.

The sign is fitted by locating the four internal hanger plate hooks into the four slots in the wall mount plate. Once located, hold the sign around the end moulding of the SignalLED assembly (where the door is fitted) and press down into its final position. The sign retaining pins will clip into the indentations on the side of the wall mount plate and this should result in a click as the plastic pins move into their final position.

Note: a reasonable amount of force is needed to fully connect the LED sign assembly to the wall plate.

LD-KC1 Ceiling Mounting Kit

Open the end covers of the sign. Take the 5mm screw out of each of the LD-KC1 brackets and use the screws to attach the sign covers to them, where indicated on the drawing below. Ensure that the sign cover sits comfortably against the metal plates on each of the bracket.

The LD-KC1 ceiling mounting kit can be used for mounting a 40cm or 20cm flush mounting sign either down from the ceiling or up from a surface, e.g. table-top or top of a rack.

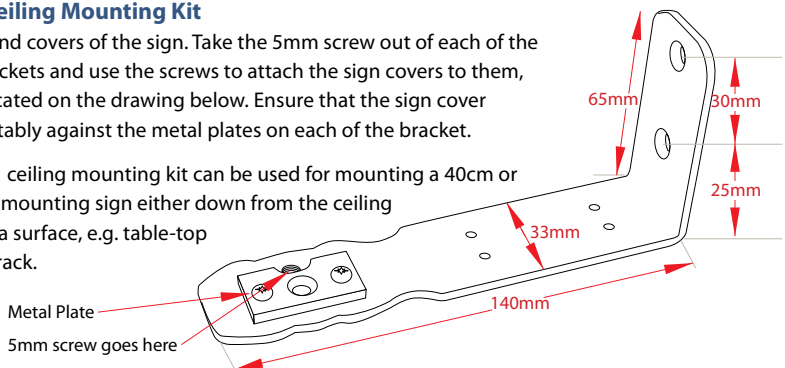


Fig 2-3: LD-KC1 Ceiling Mounting Kit

Connecting The Power and Signal Connections For Flush Mounted Signs

To get access to the cable connection block and the mode switches which are on the PCB inside the sign, the door on the underside of the end plastic moulding must be opened.

To open the door push the clip towards the sign and pull down on the small lip, see Fig 2-5. Do not attempt to remove the door from the end moulding. Access to the connection block and the mode switches is possible with the door fully open.

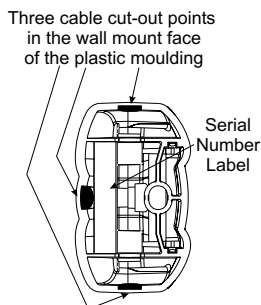


Fig 2-4: Cable Routing Cut-Outs

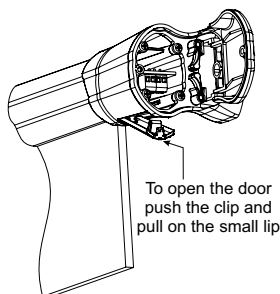


Fig 2-5: Opening The Access Door

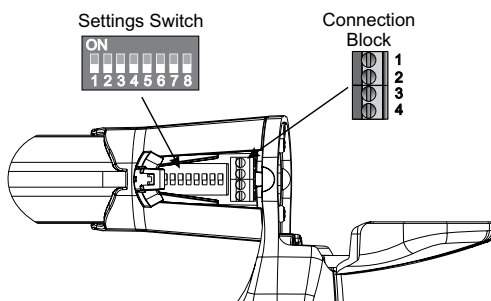
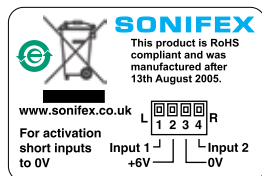


Fig 2-6: Mode Settings & Connection Bloc

Connecting The Power & Signal Connections For End Mounted Signs

It is recommended that the LD-IT SignalLED end mount sign installation tool is used to assist the termination of the power and signal connections. The tool is designed to hold the sign on the pre-fitted wall mount plate leaving both hands free to make the connections, as shown in Fig. 2-7.

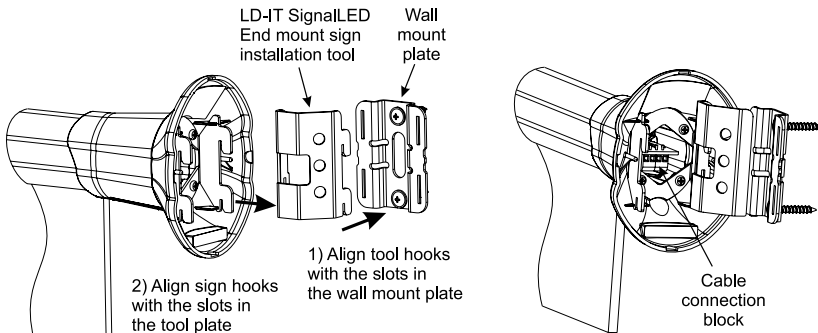
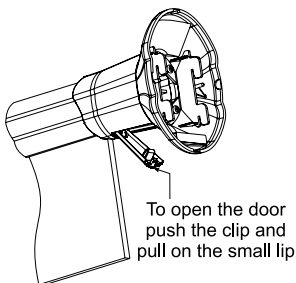


Fig 2-7: LD-IT End Mount Sign Installation Tool

To get access to the cable connection block and the mode switches, which are on the PCB inside the sign, the door on the underside of the end plastic moulding must be opened.



To open the door push the clip towards the sign and pull down on the small lip. See Fig 2-8. Do not attempt to remove the door from the end moulding. Access to the connection block and the mode switches is possible with the door fully open.

Fig 2-8: Opening The Access Door

Power Supply

The sign can be connected and powered either with the supplied DC power supply, or with a regulated DC supply rated 5V to 7V DC, 0.5mA minimum. On the supplied DC power supply, the +6V is indicated with a dashed white line on one of the cables.

Pin 1 (Signalling Input 1)

Pin 2 (+6V)

Pin 3 (0V)

Pin 4 (Signalling Input 2)

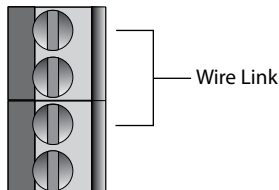


Fig 2-9: Wire Link For Power Supply

The signalling inputs are used to control the sign and are pulled low (to 0V, pin 3) to activate.

Please note pins 3 (0V) and 1 (input 1) are linked by default so that the sign will illuminate in its default mode when first powered up.

The power supply 0V is then inserted into pin 3 along with the link and the +6V supply into pin 2. The positive voltage is normally marked by a white stripe on the relevant wire - test this with a voltmeter if you are unsure.

If the sign needs to be controlled externally, remove the link and fit a switch or other contact closure. If you wish to use the sign in its alternate mode, remove this link and link pin 4 to pin 3 instead.

Use a small flat blade screwdriver to undo the connection block screw terminals and also to adjust the mode switches (see following for information on this). Do not fully remove the screws from the terminals - they only need 2 or 3 full turns to accept the wire ends. Also, take care not to apply too much force to the connection block when fitting the wire ends, as this could damage the PCB.

When the power and signalling connections have been made and the mode switches set up, close the access door by pressing the clip back to its original position. It will click into place when it is fully home.

After all of the terminations have been checked and the cables have been routed through the cable clamps, close the end cover by reversing the opening procedure, taking care not to overtighten the retaining screw.



Programming Colour & Illumination Modes

Although the SignalLED is delivered as standard to indicate a certain colour when a pull-low (to 0V) input signal is applied, the sign is programmable to allow a number of different display modes and uses. For example, the sign can be made to switch between 4 colours, one for each of the input conditions below. The sign can also illuminate a certain colour when no input signal is connected, i.e. it can be permanently illuminating, or it can be made to switch from one colour to another on application of an input signal.

Setting The Colour & Display Mode(s) of The Sign

The sign can be set to illuminate in 4 different states according to the combination of the 2 x pull-low signalling inputs present at the connector. For each state, the colour, the illumination mode and the segments to be illuminated can be programmed. To change the settings for any or all the signalling modes use the following instructions.

1. Select Input Conditions

There are four states of signalling inputs, each of which may have different display modes. To start the setup procedure select the signalling input state you wish to set as follows:

Set switches 2 and 3 to select the relevant input state, e.g. if you want to use Signalling input 1 to control the sign, then set SWT2 to On and SWT3 to Off:

Input State	Signalling Mode	SWT2	SWT3
Program resting (when no signalling inputs active)	1	Off	Off
Signalling Input 1 active	2	On	Off
Signalling Input 2 active	3	Off	On
Signalling Input 1 & Input 2 active	4	On	On



As Previous

DIPSwitches



DIPSwitches



DIPSwitches



DIPSwitches

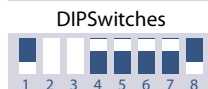
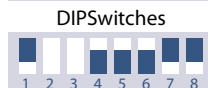


Now select the colour that you want the sign to show when the input state above is used.

2. Colour

To choose the colour of the sign set the switches as follows:

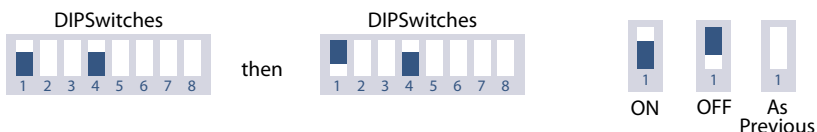
Colour	SWT4	SWT5	SWT6	SWT7	SWT8
Off	On	Off	Off	Off	Off
Red	On	On	Off	Off	Off
Green	On	Off	On	Off	Off
Blue	On	On	On	Off	Off
Cyan	On	Off	Off	On	Off
Magenta	On	On	Off	On	Off
Yellow	On	Off	On	On	Off
White	On	On	On	On	Off
Orange	On	Off	Off	Off	On
Brick Red	On	On	Off	Off	On
Dual Colour Mode*	On	On	On	On	On



*Note: Dual Colour Mode can only be assigned when both inputs are active - it will illuminate the two halves of the sign according to the colours set for input 1 and input 2 individually.

2-1. Load Colour Settings

Once the DIPSwitches are set in the required state, toggle SW1 (i.e. DIPSwitch SW1 On and then Off) to set the colour.



3. Setting Which Side (Segment) of Your Sign Illuminates

For 40cm signs the two sides of the sign can be controlled independently, i.e. different colours and flashing modes can be controlled on each side.

Side (Segment)	SWT4	SWT5	SWT6	SWT7	SWT8
Master (section of the sign nearest the connection block)	Off	Off	Off	Off	Off
Slave (section of the sign furthest from the connection block)*	Off	Off	On	Off	Off
Whole Sign	Off	Off	Off	On	Off

DIPSwitches 1 2 3 4 5 6 7 8

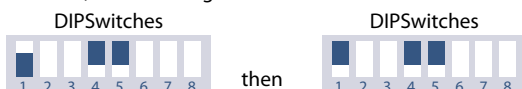
DIPSwitches 1 2 3 4 5 6 7 8

DIPSwitches 1 2 3 4 5 6 7 8

*Note: The slave segment is not valid for 20cm signs and so, selecting this option with a 20cm sign will mean that the sign will appear to be switched off.

3-1. Load Segment Selection Setting

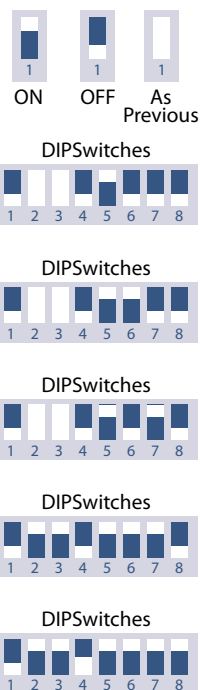
Once the DIPSwitches are set in the required state, toggle SW1 (i.e. DIPSwitch 1 On and then Off) to set the segment selection.





4. Setting the Illumination Mode

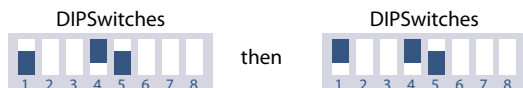
Illumination Mode	SWT4	SWT5	SWT6	SWT7	SWT8
On Constantly	Off	On	Off	Off	Off
Flashing (0.5 sec on, 0.5 sec off, continuous)	Off	On	On	Off	Off
Pulsing (4 x on/off in 0.5 sec, 0.5 sec off, continuous)	Off	On	Off	On	Off
Alternate Flash Mode*	Off	On	On	On	Off
Follow Mode*	Off	On	On	On	On



*Note: Alternate Flash & Follow modes can only be assigned when both pull-low inputs are active, so DIPSwitches 2 & 3 must both be set to On. They will illuminate the two halves of the sign according to the modes set for input 1 and input 2. These modes are designed for 40cm signs that have segments independently set by signalling modes 2 & 3.

4.1. Load Illumination Mode Setting

Once the DIPSwitches are set in the required state toggle SW1 (ie switch SW1 on and then off).



5. Next Steps

Now repeat steps 1-4 for all remaining input conditions to be changed and then return all switches to the off state.

Note: Remember if you're using both inputs to control the sign, you need to configure the case when both inputs are active as well as when each individual input is active. Dual Colour Mode (page 8) may be useful in this application.

Technical Specifications

Physical Specification

Power Supply:	Plug-top power supply providing 6V at 1A, with 4 international wall adapters (UK, EU, US and AUS) and 5m lead to bare ends.
Power Input:	5-7V DC
40cm Sign:	500mA max
Input Connector:	4 way screw terminal block
Control Inputs:	2 x pull-down to 0V
Perspex Dimensions:	Single: 40cm (W) x 8cm (H)
Overall Sign Dimensions:	
LD-20F1	333mm x 129mm x 60mm
LD-40E1	493mm x 149mm x 71mm
LD-40E2	493mm x 149mm x 71mm
LD40-F1	527mm x 129mm x 60mm
LD-40F2	527mm x 129mm x 60mm

Equipment Type

Single Flush Mounting Signs (20cm):

LD-20F1REC	20cm 'RECORD' Sign
LD-20F1ONA	20cm 'ON AIR' Sign
LD-20F1MCL	20cm 'MIC LIVE' Sign

Single Flush Mounting Signs (40cm):

LD-40F1REC	40cm 'RECORD' Sign
LD-40F1ONA	40cm 'ON AIR' Sign
LD-40F1MCL	40cm 'MIC LIVE' Sign
LD-40F1PHN	40cm 'PHONE' Sign
LD-40F1TRF	40cm 'TRAFFIC FLAG ON' Sign
LD-40F1ADB	40cm 'AD BREAK' Sign
LD-40F1REH	40cm 'REHEARSAL' Sign
LD-40F1DOR	40cm 'DOOR' Sign
LD-40F1OBT	40cm 'OBIT' Sign
LD-40F1NOE	40cm 'NO ENTRY' Sign
LD-40F1EXIT	40cm 'EXIT' Sign
LD-40F1SIL	40cm 'SILENCE PLEASE' Sign
LD-40F1MET	40cm 'MEETING IN PROGRESS' Sign
LD-40F1INT	40cm 'INTERVIEW IN PROGRESS' Sign

Twin Flush Mounting Signs (2 x 20cm):

LD-40F2TX-REH	2 x 20cm 'TX' & 'REH' Sign
LD-40F2ONA-MCL	2 x 20cm 'ON AIR' & 'MIC LIVE' Sign

Double Sided End Mounting Signs (40cm):

LD-40E1REC	40cm 'RECORD' Sign
LD-40E1ONA	40cm 'ON AIR' Sign
LD-40E1MCL	40cm 'MIC LIVE' Sign

Mounting Kits:

LD-KE1	End Mounting Kit For 40cm Or 20cm Flush Mounting Signs
LD-IT	LED Sign End Mounting Installation Tool
LD-KC1	SignalLED Ceiling or Desk Mount Bracket (Pair)

Weights & Boxed Dimensions:

Sign Type	Width (cm)	Depth (cm)	Height (cm)	Gross Weight (cm)	Net Weight (kg)
LD-20F1 style signs	39	20	11	1.0	0.65
LD-40E1 style signs	60	20	11	1.1	0.75
LD-40E2 style signs	60	20	11	1.1	0.75
LD-40F1 style signs	60	20	11	1.1	0.75
LD-40F2 style signs	60	20	11	1.1	0.75

Note : Weights are approximate and based on a sign supplied with the PSU.



Appendix 1

LD-KE1 Signalled Conversion Kit, Single Flush Mount to End Mount

To convert the LD-20F & LD-40F style flush mount single sided signs into single sided end mount signs you will need to fit the LD-KE1 conversion kit. Please follow these instructions carefully.

Note: You'll need the following tools to use the conversion kit; a No. 0 and No.1 Pozi-drive screwdriver.

Take care not to damage the clear surface of the sign board. The surface will be marked by swarf or rough surfaces, so please use a clean cloth to hold the sign.

Because the sign is single sided the text will only be correctly viewable from one side. If the text must be viewed from one particular side this must be chosen initially as it will affect the disassembly and subsequent re-assembly of the sign

As standard the Signalled PCB is fitted into the right hand end of the LD-20F & LD-40F (see Fig 5-1). If you would like the sign to be viewable with the right hand side of the sign mounted onto the wall please use the 'Right Hand Side' fitting instructions.

If you would like the sign to be viewable with the left hand side of the sign mounted onto the wall, please use the 'Left Hand Side' fitting instructions.

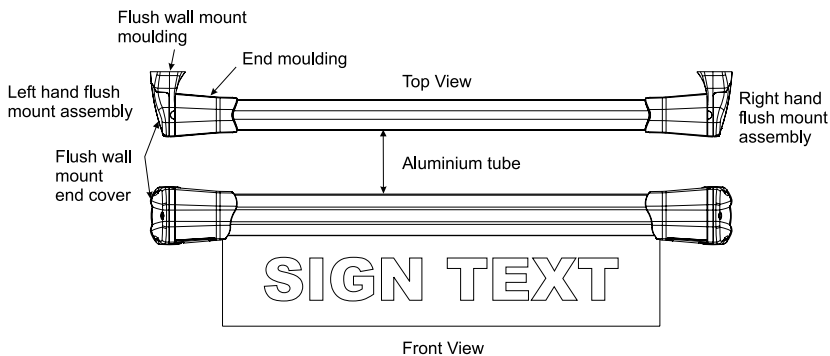


Fig 5-1: Sign Components to be Converted

Right Hand Side Fitting of the Conversion Kit

- 1) Open the end cover on the left hand flush mount assembly by removing the self tapping screw with a No.1 pozi-drive screwdriver.
- 2) Remove the left hand flush mount assembly by unscrewing the 4 screws that fix the end moulding to the aluminium tube. These are located inside at the bottom of the end moulding. See Fig 5-3.

- 3) Align the 4 pins of the extrusion end cover with the screw holes in the exposed end of the aluminium tube. Note the orientation of the cut-out with the clear sign board and press fit the end cover fully onto the aluminium tube.
- 4) Open the end cover on the right hand flush mount assembly by removing the self-tapping screw with a No.1 pozi-drive screwdriver.
- 5) Remove the flush wall mount moulding from the end moulding by unscrewing the 4 screws visible under the cover See Fig 5-4.
- 6) Fit the internal hanger plate into the end wall mount moulding. Align the semi-circular cut-out in the hanger plate with the raised section above the serial number label, which indicates the bottom of the assembly. Also make sure that the hanger plate fits into the slots in the wall mount moulding.
- 7) This combination is then fixed to the right hand flush mount assembly end moulding with the 4 supplied No.4 x $\frac{3}{4}$ self tap screws. See Fig 5-5. Do not substitute any other screws in these positions and do not reuse the screws removed from these positions, because they will not support the sign correctly.
- 8) Please refer to the installation notes for the LD-40E style signs to complete the final fitting and colour/configuration set-up.

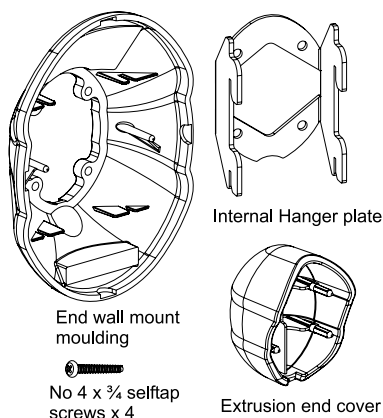


Fig 5-2: Kit Components Used for the Conversion

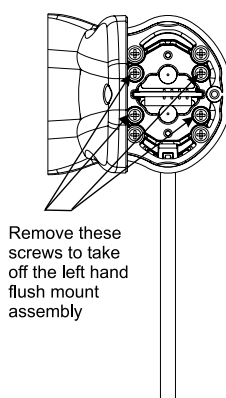


Fig 5-3: Removing the Left Hand Assembly

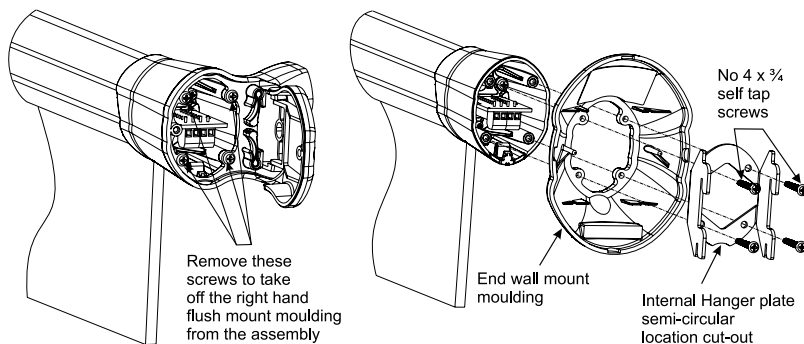


Fig 5-4: Removing the Right Hand Flush Wall Moulding

Fig 5-5: Right Hand Conversion Re-Assembly

Left Hand Side Fitting of the Conversion Kit

Note: With this conversion you will be removing the PCB from the sign so full anti-static precautions must be taken to protect the PCB from damage. Failure to do so may result in the sign not working and invalidating the warranty.

- 1) Open the end cover on the right hand flush mount assembly by removing the self-tapping screw with a No.1 pozi-drive screwdriver.
- 2) Remove the 2 small screws that hold the PCB into the right hand flush mount assembly and withdraw the PCB. Place the PCB on an antistatic surface.
- 3) Remove the right hand flush mount assembly by unscrewing the 4 screws that fix the end moulding to the aluminium tube. These are located inside at the bottom of the end moulding.
- 4) Align the 4 pins of the extrusion end cover with the screw holes in the exposed end of the aluminium tube. Note the orientation of the cut-out with the clear sign board and press fit the end cover fully onto the aluminium tube.
- 5) Open the end cover on the left hand flush mount assembly by removing the self-tapping screw with a No.1 pozi-drive screwdriver.
- 6) Remove the flush wall mount moulding from the end moulding by unscrewing the 4 screws visible under the cover.
- 7) Replace the PCB into the left hand end moulding aligning the PCB edge with the guide tracks in the aluminium extrusion. Refit the 2 small screws that hold the PCB, taking care not to over tighten and strip the plastic.
- 8) Fit the internal hanger plate into the end wall mount moulding. Align the semi-circular cut-out in the hanger plate with the raised section above the serial number label, which indicates the bottom of the assembly. Also make sure that the hanger plate fits into the slots in the wall mount moulding.

- 9) This combination is then fixed to the left hand flush mount assembly end moulding with the 4 supplied No.4 x $\frac{3}{4}$ self tap screws. Do not substitute any other screws in these positions and do not reuse the screws removed from these positions because they will not support the sign correctly.
- 10) Please refer to the installation notes for the LD-40E style signs to complete the final fitting and colour/configuration set-up.

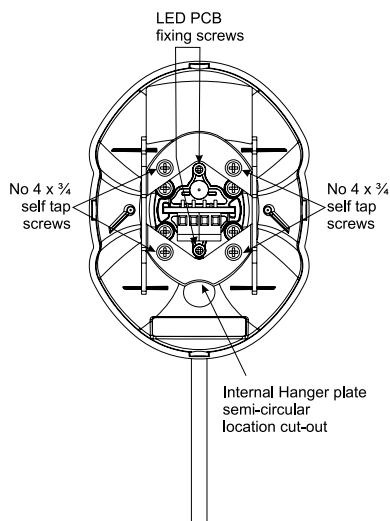


Fig 5-6: Left Hand Conversion Re-Assembly



Appendix 2

SignalLED Preconfigurations

Please note that your SignalLED sign has been preconfigured for the following operation, depending on the sign chosen.

Top Level Part Number	Slave	Master (Side with connections)	No Input	Input 1 (Default link between pins 1 and 3 on the power connector)
LD-20F1MCL		MIC LIVE	Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-20F1ONA		ON AIR	Turns the sign off	Turns the whole sign solid green when connected to 0V
LD-20F1REC		RECORD	Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40E1MCL	MIC LIVE		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40E1ONA	ON AIR		Turns the sign off	Turns the whole sign solid green when connected to 0V
LD-40E1REC	RECORD		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40F1ADB	AD BREAK		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40F1DOR	DOOR		Turns the sign off	Turns the whole sign solid blue when connected to 0V
LD-40F1EXIT	EXIT		Turns the sign off	Turns the whole sign solid green when connected to 0V
LD-40F1INT	INTERVIEW IN PROGRESS		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40F1MCL	MIC LIVE		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40F1MET	MEETING IN PROGRESS		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40F1NOE	NO ENTRY		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40F1OBT	OBIT		Turns the sign off	Turns the whole sign solid magenta when connected to 0V
LD-40F1ONA	ON AIR		Turns the sign off	Turns the whole sign solid green when connected to 0V
LD-40F1PHN	PHONE		Turns the sign off	Turns the whole sign solid yellow when connected to 0V
LD-40F1REC	RECORD		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40F1REH	REHEARSAL		Turns the sign off	Turns the whole sign solid blue when connected to 0V
LD-40F1SIL	SILENCE		Turns the sign off	Turns the whole sign solid red when connected to 0V
LD-40F1TRF	TRAFFIC FLAG		Turns the sign off	Turns the whole sign solid orange when connected to 0V
LD-40F2ONA-MCL	ON AIR	MIC LIVE	Turns the sign off	Turns the MIC LIVE segment solid red when connected to 0V
LD-40F2ONA-SIL	ON AIR	SILENCE	Turns the sign off	Turns the SILENCE segment solid orange when connected to 0V
LD-40F2TX-REH	TX	REH	Turns the sign off	Turns the REH segment solid blue when connected to 0V

SignalLED Preconfigurations (continued...)

Top Level Part Number	Input 2	Both Inputs
LD-20F1MCL	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-20F1ONA	Turns the whole sign solid red when connected to 0V	Turns the sign off
LD-20F1REC	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40E1MCL	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40E1ONA	Turns the whole sign solid red when connected to 0V	Turns the sign off
LD-40E1REC	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40F1ADB	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40F1DOR	Turns the whole sign solid red when connected to 0V	Turns the sign off
LD-40F1EXIT	Turns the whole sign solid red when connected to 0V	Turns the sign off
LD-40F1INT	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40F1MCL	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40F1MET	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40F1NOE	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40F1OBT	Turns the whole sign solid white when connected to 0V	Turns the sign off
LD-40F1ONA	Turns the whole sign solid red when connected to 0V	Turns the sign off
LD-40F1PHN	Turns the whole sign solid white when connected to 0V	Turns the sign off
LD-40F1REC	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40F1REH	Turns the whole sign solid red when connected to 0V	Turns the sign off
LD-40F1SIL	Turns the whole sign solid orange when connected to 0V	Turns the sign off
LD-40F1TRF	Turns the whole sign solid green when connected to 0V	Turns the sign off
LD-40F2ONA-MCL	Turns the ON AIR segment solid green when connected to 0V	Turns the MIC LIVE segment solid red and the ON AIR segment solid green when connected to 0V
LD-40F2ONA-SIL	Turns the ON AIR segment solid red when connected to 0V	Turns the SILENCE segment solid orange and the ON AIR segment solid red when connected to 0V
LD-40F2TX-REH	Turns the TX segment solid red when connected to 0V	Alternates REH in solid blue, TX in solid red

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